

THAT WHICH IS CLAIMED:

1. A polymer composition comprising
 - (a) at least one cycloolefinic polymer comprising at least one cyclic olefin mer and at least one acyclic mer, and
 - (b) at least one non-halogenated elastomeric copolymer comprising at least one aromatic vinyl mer and at least one saturated alkene mer, said elastomeric copolymer having an aromatic vinyl content of from 14 to 39 weight percent boec, wherein said polymer composition exhibits a haze value of 40 % or less and a peak impact energy of 0.05 joules or greater.
2. A polymer composition according to Claim 1, wherein said elastomeric copolymer has an aromatic vinyl mer content of from 20 to 35 weight percent, boec.
3. A polymer composition according to Claim 1, wherein said cyclic olefin mer comprises mer units derived from at least one monomer selected from the group consisting of norbornene, tetracyclododecene, bicyclo[2,2,1]hept-2-ene, 1-methylbicyclo[2,2,1]hept-2-ene, hexacyclo [6,6,1,1^{3,6},1^{10,13},0^{2,7},0^{9,14}]-4- heptadecene.
4. A polymer composition according to Claim 1, wherein said acyclic mer comprises mer units derived from at least one monomer selected from the group consisting of ethylene and propylene.
5. A polymer composition according to Claim 1, wherein said cycloolefinic polymer comprises a copolymer of norbornene and ethylene.
6. A polymer composition according to Claim 1, wherein said aromatic vinyl mer comprises mer units derived from at least one monomer selected from the group consisting of styrene, vinyl toluene and t-butyl styrene.
7. A polymer composition according to Claim 1, wherein said saturated alkene comprises mer units derived from at least one monomer selected from the group consisting of ethylene, propylene, butylene, partially hydrogenated butadiene and partially hydrogenated isoprene.

8. A polymer composition according to Claim 1, wherein said elastomeric copolymer comprises at least one member selected from the group consisting of styrene-ethylene-butylene-styrene and styrene-propylene-styrene.

9. A polymer composition according to Claim 1, wherein said elastomeric copolymer comprises styrene-ethylene-butylene-styrene.

10. A polymer composition according to Claim 1, wherein said polymer composition comprises elastomeric copolymer in an amount of from 2 to 75 weight percent, bohm.

11. A polymer composition according to Claim 1, wherein said polymer composition comprises elastomeric copolymer in an amount of from 10 to 50 weight percent, bohm.

12. A polymer composition according to Claim 1, wherein said polymer composition exhibits a haze value of 10% or less and a peak impact energy of 0.07 or greater.

13. A polymer composition according to Claim 1, wherein said at least one cycloolefinic polymer has a glass transition temperature ranging from 70 to 200°C.

14. A polymer composition according to Claim 1, wherein said at least one cycloolefinic polymer has a glass transition temperature ranging from 100 to 180°C.

15. A film comprising at least one layer formed from

(a) at least one cycloolefinic polymer comprising at least one cyclic olefin mer and at least one acyclic mer, and

(b) at least one non-halogenated elastomeric copolymer comprising at least one aromatic vinyl mer and at least one saturated alkene mer, said elastomeric copolymer having an aromatic vinyl content of from 14 to 39 weight percent boec,

wherein said polymer composition exhibits a haze value of 40% or less and a peak impact energy of 0.05 joules or greater.

16. A film according to Claim 15, wherein said elastomeric copolymer comprises aromatic vinyl in an amount of from 20 to 35 weight percent, boec.

17. A film according to Claim 15, wherein said cycloolefinic polymer comprises a copolymer of norbornene and ethylene.

18. A film according to Claim 15, wherein said elastomeric copolymer comprises styrene-ethylene-butylene-styrene.

19. A film according to Claim 15, wherein said polymer composition comprises elastomeric copolymer in an amount of from 2 to 75 weight percent, bohbm.

20. A film according to Claim 15, further comprising at least one additional layer.

21. A film according to Claim 20, wherein said at least one additional layer comprises at least one layer selected from the group consisting of heat seal layer, oxygen barrier layer, printable layer, abuse layer, tie layer, anti-curl layer, and adhesive layer.

22. A film according to Claim 15, wherein said at least one cycloolefinic polymer has a glass transition temperature ranging from 70 to 200°C.

23. A film according to Claim 15, wherein said at least one cycloolefinic polymer has a glass transition temperature ranging from 100 to 180°C.

24. A method of making a film comprising

(a) forming a polymer composition by combining at least one cycloolefinic polymer with at least one non-halogenated elastomeric copolymer comprising at least one aromatic vinyl mer and at least one saturated alkene mer, said elastomeric copolymer having an aromatic vinyl content of from 14 to 39 weight percent, boec, and

(b) extruding the high modulus polymer composition through a heated die to form a high modulus layer.

25. A method of making a film according to Claim 24, wherein said step of extruding further comprises coextruding the high modulus layer and at least one additional layer.

26. A method of making a film according to Claim 25, wherein said at least one additional layer comprises one or more layers selected from the group consisting of heat seal layer, oxygen barrier layer, printable layer, abuse layer, tie layer, anti-curl layer, and adhesive layer.

27. An article formed from a polymer composition comprising

(a) at least one cycloolefinic polymer comprising at least one cyclic olefin mer and at least one acyclic mer, and

(b) at least one non-halogenated elastomeric copolymer comprising at least one aromatic vinyl mer and at least one saturated alkene mer, said elastomeric copolymer having an aromatic vinyl content of from 14 to 39 weight percent based on,

wherein said polymer composition exhibits a haze value of 40% or less and a peak impact energy of 0.05 joules or greater.

28. An article according to Claim 27, wherein said article is selected from the group consisting of monolayer film, multilayer film, molded articles, pultruded articles, stamped articles and composite articles.